


```

DDDDDDDD    SSSSSSSS    PPPPPPPP    PPPPPPPP    AAAAAA    GGGGGGGG
DDDDDDDD    SSSSSSSS    PPPPPPPP    PPPPPPPP    AAAAAA    GGGGGGGG
DD          DD    SS          PP          PP    PP          PP    AA          AA    GG
DD          DD    SS          PP          PP    PP          PP    AA          AA    GG
DD          DD    SS          PP          PP    PP          PP    AA          AA    GG
DD          DD    SS          PP          PP    PP          PP    AA          AA    GG
DD          DD    SSSSSS    PPPPPPPP    PPPPPPPP    AA          AA    GG
DD          DD    SSSSSS    PPPPPPPP    PPPPPPPP    AA          AA    GG
DD          DD                SS    PP          PP    AAAAAAAAAA    GG    GGGGGG
DD          DD                SS    PP          PP    AAAAAAAAAA    GG    GGGGGG
DD          DD                SS    PP          PP    AA          AA    GG    GG
DD          DD                SS    PP          PP    AA          AA    GG    GG
DDDDDDDD    SSSSSSSS    PP          PP          PP    AA          AA    GGGGGG
DDDDDDDD    SSSSSSSS    PP          PP          PP    AA          AA    GGGGGG

```

```

LL               IIIIII
LL               IIIIII
LL               II
LL               II
LL               II
LL               II
LL               II
LL               II
LL               II
LL               II
LL               II
LL               II
LL               II
LL               II
LLLLLLLLLLLLLL  IIIIII
LLLLLLLLLLLLLL  IIIIII

                SSSSSSSS
                SSSSSSSS
                SS
                SS
                SS
                SS
                SSSSSS
                SSSSSS
                SS
                SS
                SS
                SS
                SSSSSSSS
                SSSSSSSS

```

```
1 0001 0 %TITLE 'Processes the .DISPLAY NUMBER, & .DISPLAY SUBPAGE'
2 0002 0 MODULE DSPPAG ( IDENT = 'V04-000'
3 P 0003 0 %BLISS32[
4 P 0004 0 ADDRESSING_MODE(EXTERNAL=LONG_RELATIVE, NONEXTERNAL=LONG_RELATIVE)
5 0005 0 ]
6 0006 0 ) =
7 0007 1 BEGIN
8 0008 1
9 0009 1
10 0010 1 *****
11 0011 1 *
12 0012 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
13 0013 1 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
14 0014 1 * ALL RIGHTS RESERVED.
15 0015 1 *
16 0016 1 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
17 0017 1 * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
18 0018 1 * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
19 0019 1 * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
20 0020 1 * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
21 0021 1 * TRANSFERRED.
22 0022 1 *
23 0023 1 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
24 0024 1 * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
25 0025 1 * CORPORATION.
26 0026 1 *
27 0027 1 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
28 0028 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
29 0029 1 *
30 0030 1 *
31 0031 1 *****
32 0032 1
33 0033 1 ++
34 0034 1 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
35 0035 1
36 0036 1 ABSTRACT: Processes the .DISPLAY APPENDIX, .DISPLAY CHAPTER, .DISPLAY NUMBER, and .DISPLAY SUBPAGE command
37 0037 1
38 0038 1
39 0039 1 ENVIRONMENT: Transportable
40 0040 1
41 0041 1 AUTHOR: R.W.Friday CREATION DATE: May, 1979
42 0042 1
```



```

: 44 0043 1 XSBTTL 'Revision History'
: 45 0044 1
: 46 0045 1 MODIFIED BY:
: 47 0046 1
: 48 0047 1 004 REM00004 Ray Marshall 27-April-1983
: 49 0048 1 To decommit this routine's handling of the .DISPLAY APPENDIX and
: 50 0049 1 .DISPLAY CHAPTER directives. They will hence forth be handled
: 51 0050 1 by code DSPENT.BLI.
: 52 0051 1
: 53 0052 1 003 KFA00003 Ken Alden 07-Mar-1983
: 54 0053 1 Global edit of all modules. Updated module names, idents,
: 55 0054 1 copyright dates. Changed require files to BLISS library.
: 56 0055 1
: 57 0056 1 --

```

```
59 0057 1 %SBTTL 'Module Level Declarations'
60 0058 1
61 0059 1 TABLE OF CONTENTS:
62 0060 1
63 0061 1
64 0062 1
65 0063 1 INCLUDE FILES:
66 0064 1
67 0065 1
68 0066 1 LIBRARY 'NXPORT:XPORT';          ! XPORT Library
69 0067 1 REQUIRE 'REQ:RNODEF';          ! RUNOFF variant definitions
70 0198 1
71 U 0199 1 %IF DSRPLUS %THEN
72 U 0200 1 LIBRARY 'REQ:DPLLIB';          ! DSRPLUS BLISS Library
73 0201 1 %ELSE
74 0202 1 LIBRARY 'REQ:DSRLIB';          ! DSR BLISS Library
75 0203 1 %FI
76 0204 1
77 0205 1
78 0206 1 MACROS:
79 0207 1
80 0208 1 Although the SET_DISPLAY macro has four parameters, it always
81 0209 1 appears as if it's being called with just one. That's because
82 0210 1 all the display names (e.g., SCT_PAGE_D) are really macros
83 0211 1 defining fields, and they expand into a 'comma list' containing
84 0212 1 four items.
85 0213 1 MACRO
86 M 0214 1 SET_DISPLAY (a,b,c,d) =
87 M 0215 1 BEGIN
88 M 0216 1 !The display characteristics take effect on the next
89 M 0217 1 !page, at the very latest. So that is always safe to set.
90 M 0218 1 NPAGEN [a,b,c,d] = .DISPLAY_CODE;
91 M 0219 1 !At the top of the first page this takes effect immediately, since nothing
92 M 0220 1 !has been output yet at all. However, at the top of any other pages you
93 M 0221 1 !have to be careful. If the user has given a .LAYOUT command that
94 M 0222 1 !causes the page number to be centered at the bottom, the page number
95 M 0223 1 !has not yet been output even if .PHAN_TOP_PAGE is set. In that case
96 M 0224 1 !you need to let NEWPAG finish the page and then it's ok to use the
97 M 0225 1 !display characteristics on the next page. On the other hand,
98 M 0226 1 !if you're in the middle of the page it's ok to set the display
99 M 0227 1 !characteristics immediately because the page number hasn't gone
100 M 0228 1 !out yet, unless you're doing the standard layout.
101 M 0229 1 !Perhaps another way of describing what's going on here is simply to
102 M 0230 1 !say that you can't let the display characteristics of the page number
103 M 0231 1 !get out of synch with what's appeared or not appeared so far.
104 M 0232 1 !Note that there is a very close coordination with the workings of
105 M 0233 1 !NEWPAG implied here.
106 M 0234 1 IF
107 M 0235 1 .PHAN_TOP_FIRST
108 M 0236 1 OR
109 M 0237 1 ( (NOT .PHAN_TOP_PAGE)
110 M 0238 1 AND (.HCT_LAYOUT NEQ LAYOUT_STANDARD) )
111 M 0239 1 THEN
112 M 0240 1 PAGEN [a,b,c,d] = .DISPLAY_CODE
113 M 0241 1 END
114 0242 1
115 0243 1 %;
```

DSPPAG
V04-000

Processes the .DISPLAY NUMBER, & .DISPLAY SUBPA
Module Level Declarations

M 13
16-Sep-1984 00:22:09
14-Sep-1984 13:06:03

VAX-11 Bliss-32 V4.0-742
[RUNOFF.SRC]DSPPAG.BLI;1

Page 4
(3)

```

: 116      0244 1  |
: 117      0245 1  | EQUATED SYMBOLS:
: 118      0246 1  |
: 119      0247 1  |
: 120      0248 1  |
: 121      0249 1  | OWN STORAGE:
: 122      0250 1  |
: 123      0251 1  |
: 124      0252 1  |
: 125      0253 1  | EXTERNAL REFERENCES:
: 126      0254 1  |
: 127      0255 1  | EXTERNAL
: 128      0256 1  |   HCT : HCT_DEFINITION,
: 129      0257 1  |   IRA : FIXED_STRING,
: 130      0258 1  |   PHAN : PHAN_DEFINITION,
: 131      0259 1  |   PAGEN : PAGE_DEFINITION,
: 132      0260 1  |   NPAGEN : PAGE_DEFINITION;
: 133      0261 1  |
: 134      0262 1  | EXTERNAL ROUTINE
: 135      0263 1  |   GETDD,
: 136      0264 1  |   RSKIPS;
```



```
138 0265 1 GLOBAL ROUTINE DSPPAG (HANDLER) : NOVALUE = !
139 0266 1
140 0267 1 ++
141 0268 1 FUNCTIONAL DESCRIPTION:
142 0269 1
143 0270 1 See the ABSTRACT for a general description.
144 0271 1
145 0272 1 FORMAL PARAMETERS:
146 0273 1
147 0274 1 HANDLER indicates which command is to be processed.
148 0275 1
149 0276 1 IMPLICIT INPUTS:
150 0277 1
151 0278 1 Very close coordination with the workings of NEWPAG is implied.
152 0279 1
153 0280 1 IMPLICIT OUTPUTS: None
154 0281 1
155 0282 1 ROUTINE VALUE:
156 0283 1 COMPLETION CODES: None
157 0284 1
158 0285 1 SIDE EFFECTS: None
159 0286 1
160 0287 1 --
161 0288 1
162 0289 2 BEGIN
163 0290 2 LOCAL
164 0291 2 GETDD_RESULT,
165 0292 2 DISPLAY_CODE;
166 0293 2
167 0294 2 !Skip spaces and tabs before the display descriptor.
168 0295 2 RSKIPS (IRA);
169 0296 2
170 0297 2 !And now actually try to get the descriptor.
171 0298 2 GETDD_RESULT = GETDD (DISPLAY_CODE);
172 0299 2
173 0300 2 !Ignore an invalid descriptor
174 0301 2 IF .GETDD_RESULT EQL -1
175 0302 2 THEN
176 0303 2 RETURN;
177 0304 2
178 0305 2 !Distinguish between missing display code and one that
179 0306 2 is given.
180 0307 2 IF .GETDD_RESULT EQL 0
181 0308 2 THEN
182 0309 2 !No display code supplied
183 0310 2 BEGIN
184 0311 2 !Supply the standard display as the default
185 0312 2 DISPLAY_CODE = (SELECTONE .HANDLER OF
186 0313 2 SET
187 0314 2 [H_DISPLAY_NUMBE] : TCONVRT_DEC_NOZ;
188 0315 2 [H_DISPLAY_SUBPA] : TCONVRT_LET_UPP;
189 0316 2 TES );
190 0317 2
191 0318 2 END;
192 0319 2 SELECTONE .HANDLER OF
193 0320 2 SET
194 0321 2
```

```
: 195      0322 2      [H_DISPLAY_NUMBE] : SET_DISPLAY (SCT_PAGE D);  
: 196      0323 2      [H_DISPLAY_SUBPA] : SET_DISPLAY (SCT_SUBPG_D);  
: 197      0324 2      TES;  
: 198      0325 2  
: 199      0326 1      END;                                !End of DSPPAG
```

```
:  
: .TITLE DSPPAG Processes the .DISPLAY NUMBER, & .DISPLA  
: .IDENT \V04-000\  
: .EXTRN HCT, IRA, PHAN, PAGEN  
: .EXTRN NPAGEN, GETDD, RSKIPS  
: .PSECT $CODE$,NOWRT,2  
: .ENTRY DSPPAG, Save R2,R3  
: 0265  
: 53 00000000G EF 9E 00002 MOVAB HCT+28, R3  
: 52 00000000G EF 9E 00009 MOVAB PHAN+24, R2  
: 5E 00000000G EF 04 C2 00010 SUBL2 #4, SP  
: 00000000G EF 01 FB 00019 PUSHAB IRA  
: 0295  
: 00000000G EF 5E DD 00020 CALLS #1, RSKIPS  
: 0298  
: FFFFFFFF EF 01 FB 00022 CALLS #1, GETDD  
: 8F 50 D1 00029 CMPL GETDD_RESULT, #-1  
: 0301  
: 6A 13 00030 BEQL 8$  
: 50 D5 00032 TSTL GETDD_RESULT  
: 0307  
: 1D 12 00034 BNEQ 4$  
: 50 04 AC D0 00036 MOVL HANDLER, R0  
: 0312  
: 26 50 D1 0003A CMPL R0, #38  
: 0314  
: 04 04 12 0003D BNEQ 1$  
: 50 D4 0003F CLRL R0  
: 0D 11 00041 BRB 3$  
: 28 50 D1 00043 1$: CMPL R0, #40  
: 0315  
: 05 13 00046 BEQL 2$  
: 50 01 CE 00048 MNEGL #1, R0  
: 03 11 0004B BRB 3$  
: 50 02 D0 0004D 2$: MOVL #2, R0  
: 6E 50 D0 00050 3$: MOVL R0, DISPLAY_CODE  
: 0312  
: 50 04 AC D0 00053 4$: MOVL HANDLER, R0  
: 0319  
: 26 50 D1 00057 CMPL R0, #38  
: 0322  
: 00000000G EF 04 04 1E 12 0005A BNEQ 6$  
: 04 6E F0 0005C INSV DISPLAY_CODE, #4, #4, NPAGEN  
: 08 62 E8 00065 BLBS PHAN+24, 5$  
: 30 E8 A2 E8 00068 BLBS PHAN, 8$  
: 63 D5 0006C TSTL HCT+28  
: 2C 13 0006E BEQL 8$  
: 00000000G EF 04 04 6E F0 00070 5$: INSV DISPLAY_CODE, #4, #4, PAGEN  
: 04 04 00079 RET  
: 28 50 D1 0007A 6$: CMPL R0, #40  
: 0323  
: 1D 12 0007D BNEQ 8$  
: 00000000G EF 04 00 6E F0 0007F INSV DISPLAY_CODE, #0, #4, NPAGEN+12  
: 08 62 E8 00088 BLBS PHAN+24, 7$  
: 0D E8 A2 E8 0008B BLBS PHAN, 8$  
: 63 D5 0008F TSTL HCT+28  
: 09 13 00091 BEQL 8$  
: 00000000G EF 04 00 6E F0 00093 7$: INSV DISPLAY_CODE, #0, #4, PAGEN+12
```


; Routine Size: 157 bytes, Routine Base: \$CODE\$ + 0000

```

; 200      0327 1 END      !End of module
; 201      0328 0 ELUDOM

```

PSECT SUMMARY		
Name	Bytes	Attributes
\$CODE\$	157	NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

Library Statistics					
File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
\$255\$DUA28:[SYSLIB]XPORT.L32;1	590	0	0	252	00:00.1
\$255\$DUA28:[RUNOFF.SRC]DSRLIB.L32;1	1248	16	1	86	00:00.3

```

;
;      COMMAND QUALIFIERS
;      BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:DSPPAG/OBJ=OBJ$:DSPPAG MSRC$:DSPPAG/UPDATE=(ENH$:DSPPAG)
;
; Size:      157 code + 0 data bytes
; Run Time:   00:04.0
; Elapsed Time: 00:12.7
; Lines/CPU Min: 4969
; Lexemes/CPU-Min: 14000
; Memory Used: 47 pages
; Compilation Complete

```


0339

AH-BT13A-SE
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION
CONFIDENTIAL AND PROPRIETARY